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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347			EXAMINER NGUYEN, VAN H	
			ART UNIT 2126	PAPER NUMBER

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/090,119

Applicant(s)

HALSTEAD, MARK A.B.

Examiner

VAN H NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-65 are presented for examination.
2. It is noted that applicant has other related application, now U.S Patent No. 6,096,095 filed on June 04, 1998. It is requested that any related application be referred to in the first sentence of the specification. Applicant is also requested to supply the serial numbers of any other related applications currently pending before the U.S Patent & Trademark Office.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. CIT. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Uogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
4. A timely filed terminal disclaimer in compliance with 37 C.F.R. ' 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. ' 1.78(d).
5. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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6. Claim 53 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent 6,096,095. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 53 of instant application and claim 8 of patent '095 are both claiming a method comprising; recording a sequence of calls from an authoring tool to a set of predefined functions used to create a complex data object; translating the recorded sequence of calls into a sequence of directly executable instructions; and storing the sequence of directly executable instructions as a persistent representation of the structure of the complex data object. The difference between claim 53 of the instant application and claim 8 of patent '095 is claim 8 of patent '095 further recites generating a list of code fragments from the method calls. The difference would be obvious to a programmer of ordinary skill because claim 53 of the instant application is merely broader variations of claim 8 recited in patent '095.

7. As to the remaining claims 1-52 and 54-65, they are also rejected under obvious type double patenting as stated in claim 53 above.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-7, 22, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The phrase "a set of predefined functions" (claim 1, line 6) is indefinite. It is not clear if it is referred to "a set of predefined functions" line 5.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 49-65 are rejected under 35 U.S.C. 102(e) as being anticipated by **Henckel**.

12. Henckel was cited in the previous office action.

13. As to claim 61, Henckel teaches the invention as claim including a system for recreating a complex data object from a persistent representation of its structure (see the abstract), the system comprising:

an authoring tool for recording a sequence of calls to a predefined set of data types and methods for creating a complex data object (fig.4 and the associated text); and

a program generator for translating the recorded sequence of calls into a sequence of directly executable instructions and storing the sequence of directly executable instructions as a persistent representation of the structure of the complex data object (col.4, lines 34-40) .

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14. As to claim 62, Henckel teaches the complex data object is a multimedia presentation (col.4, lines 20-24).

15. As to claim 63, Henckel teaches the predefined set of data types and methods further comprises information about the readable name of each method, whether each method returns a result, whether each method has a side effect, and the number of arguments for each method (see fig.8 and the associated text).

16. As to claim 64, Henckel teaches recording the sequence of calls further comprises obtaining the readable name of each method, whether each method returns a result, whether each method has a side effect, and the number of arguments for each method from the predefined set of data types and methods (col.11, lines 13-46).

17. As to claim 65, Henckel teaches the sequence of calls are recorded as a sequence of code fragments representing each method called, the arguments to each method, and the order in which the authoring tool made the call (col.10, lines 37-49).

18. As to claim 49, Henckel teaches a storage medium containing a persistent representation of the structure of a multicomponent data object as a sequence of instructions directly executable (see the abstract), wherein the directly executable instructions are generated by recording a sequence of calls from an authoring tool (fig.4 and the associated text) to a set of predefined functions used to create the multicomponent data object (col.4, lines 47-51) and translating the recorded sequence of calls into the sequence of directly executable instructions (col.4, lines 33-35), and wherein the directly executable instructions are calls to a set of predefined functions that are called by a program interpreter implemented in a digital computer (col.4, lines 38-40) so as to recreate the structure of the multicomponent data object (col.4, lines 41-50).

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19. As to claim 50, Henckel teaches the data object is a multimedia presentation (col.4, lines 20-24).

20. As to claim 51, Henckel teaches some of the instructions are compressed identifiers for different ones of a predefined set of methods (see table 1 in col.7).

21. As to claim 52, Henckel teaches others of the instructions are data in different ones of a set of predefined data types (col.8, lines 17-34).

22. As to claims 53 and 54, refer to claims 49 and 50 above.

23. As to claims 55-57, refer to claims 63-65 above.

24. As to claim 58, Henckel teaches using a stack-based virtual machine for interpreting the directly executable instructions as calls to a set of predefined functions (col.4, lines 33-51).

25. As to claim 59, Henckel teaches calling a predefined function corresponding to each directly executable instruction in the sequence of directly executable instructions to construct the complex data object directly from the persistent representation (col.4, line 58-col.5, line 12).

26. As to claim 60, Henckel teaches a computer-readable medium having computer-executable instructions for performing the method recited in claim 53 (see fig. 1).

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Henckel**.

29. As to claims 1, 8, 10, 15, 19, 22, and 23, Henckel teaches the invention substantially as claim including a storage medium containing computer-executable instructions and data for interpreting a persistent representation (col.4, lines 33-40) of the structure of a complex data object (col.4, lines 20-27) as a sequence of directly executable virtual instructions for directly constructing the complex data object as a series of calls on a library of predefined functions (see fig.5 and the associated text).

Henckel does not specifically teach "*without parsing*."

It would have been obvious to one of ordinary skill in the art to have applied the teachings of Henckel to include the features as claimed because Henckel's teachings would have provided the capability for permitting a user to selectively minimize the representation of a data set in a source code file, or to expand the representation of the data set for viewing or editing of the specific data in the set.

The fact that Henckel's teachings "**may** also perform various parsing operations" (col.6, lines 36-40); and "**may** also perform various parsing" in Henckel suggests "*without parsing*."

30. As to claim 2, Henckel teaches displaying the data object to a user (fig. 4).

31. As to claim 3, Henckel teaches the data object is a multimedia presentation (col.4, lines 20-24).

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32. As to claim 4, Henckel teaches at least some of the functions have arguments (col.15, lines 39-45).

33. As to claim 5, Henckel teaches a call to one of the functions includes a call to another function as an argument of the first function (col.15, lines 46-57).

34. As to claim 6, Henckel teaches a call to one of the functions includes obtaining a constant value as its argument (col.15, lines 57-62).

35. As to claim 7, Henckel teaches at least some of the functions return an explicit result (fig. 8).

36. As to claim 9, refer to claim 2 above.

37. As to claim 24, Henckel teaches the program interpreter is a virtual machine located in a computer in which the complex data object is presented to the user (col.4, lines 41-51).

38. As to claim 25, Henckel teaches the program interpreter is a stack-based virtual machine (col.4, lines 33-39).

39. As to claim 26, Henckel teaches the stack-based virtual machine further includes a temporary storage array (figs. 21 & 22).

40. As to claim 11, refer to claim 3 above.

41. As to claims 12-14, refer to claims 24-26 above.

42. As to claim 27, Henckel teaches the library is an application program interface (fig.5).

43. As to claim 16, refer to claim 3 above.

44. As to claim 17, Henckel teaches some of the instructions are compressed identifiers for different ones of a predefined set of methods (col.8, lines 18-34).

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45. As to claim 18, Henckel teaches others of the instructions are data in different ones of a set of predefined data types (col.8, lines 35-59).

46. As to claim 19, Henckel teaches some of the virtual instructions represent arguments for others of the instructions (see fig. 4 and the associated text).

47. As to claim 20, Henckel teaches the computer-executable instructions and data implement a stack-based virtual machine (col.4, lines 41-51).

Indication of Allowable Subject Matter

48. Claims 28-48 appear to be allowable over the prior art of record, subject to the obviousness-type double patenting rejection detailed above, and subject to a final search.

Response to Arguments

49. Applicant's arguments with respect to claims 1-65 have been fully considered, but are deemed to be moot in view of the new grounds of rejection.

Conclusion

50. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765.

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The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

51. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756.

52. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

53. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
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